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NOTICE OF ALLOWANCE AND FEE(S) DUE

27194	7590	09/03/2009

HOWREY LLP-CA
C/O IP DOCKETING DEPARTMENT
2941 FAIRVIEW PARK DRIVE, SUITE 200
FALLS CHURCH, VA 22042-2924

EXAMINER
WONG, XAVIER S

ART UNIT	PAPER NUMBER
2416	

DATE MAILED: 09/03/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,729	03/30/2004	Kha H. Nguyen	02453.0029.NPUS00	8796

TITLE OF INVENTION: SYSTEM AND METHOD FOR EGRESS PACKET MARKING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$0	$1510	$1510	12/03/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

Page 1 of 3

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: <u>Mail</u> Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
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or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

27194   7590   09/03/2009

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Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

_____ (Depositor's name)

_____ (Signature)

_____ (Date)

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10/814,729	03/30/2004	Kha H. Nguyen	02453.0029.NPUS00	8796

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nonprovisional	NO	$1510	$0	$1510	$1510	12/03/2009

EXAMINER		ART UNIT	CLASS-SUBCLASS
WONG, XAVIER S		2416	370-474000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE   (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

☐ Issue Fee

☐ Publication Fee (No small entity discount permitted)

☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

☐ A check is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.   ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____   Date _____

Typed or printed name _____   Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.   OMB 0651-0033   U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

UNITED STATES PATENT AND TRADEMARK OFFICE

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2416	

DATE MAILED: 09/03/2009

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1153 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1153 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

	Application No.	Applicant(s)
Notice of Allowability	10/814,729	NGUYEN ET AL.
	Examiner	Art Unit
	Xavier Wong	2416

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address--*

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to _4th August 2009_.

2. ☒ The allowed claim(s) is/are _60-80 renumbered to 1-21 respectively_.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

      a) ☐ All   b) ☐ Some*   c) ☐ None of the:

          1. ☐ Certified copies of the priority documents have been received.

          2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

          3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

     * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

        Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____.

Reasons for Allowance

Claims 60, 68 and 73: Prior art of record do not very particularly mention "updating the field using the value of the field taken from the packet prior to modification thereof by the packet modification system as stored in the one or more memories;

updating the field using a value obtained by performing a table lookup operation on the table stored in the one or more memories, using as an index in said operation a value obtained or derived from information associated with the packet by the packet classification system; and updating the field using a value derived from at least one of the one or more egress mark commands; wherein at least one of the one or more QoS fields of the packet are selected from the group consisting of a Virtual Local Area Network Priority (VLAN VPRI) field, a Multi Protocol Label Switching Experimental Use (MPLS EXP) field, and an Internet Protocol version 4 Type of Service/version 6 Traffic Class (IPv4ToS/IPv6TC) field." Thus, claims 60, 68 and 73 are deemed to be non-obvious over prior art of record.

Claims 61-67, 69-72 and 74-80 are directly or indirectly dependent on claims 60, 68 and 73, thus, are deemed to be non-obvious over prior art of record as well.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Mohaban et al, US 2007/0204036 A1: creating policies for policy-based management of quality of service treatments of network data traffic flows

2. Deerman et al, US 7002974 B1: QoS processor also includes a packet modification engine, which is operable to modify, add, or delete bits in any of the fields of a data packet; and allows QoS processor to change DiffServ bits, or to place the appropriate MPLS shims on the data packets for the required treatment

3. Hussain et al, US 2003/0223361 A1: QoS translator may take the updated LQ header PRI and RM fields and may reverse translate these back to the packet's TOS/EXP field; if the QoS pointer is NULL, then the translation may be skipped

4. Jin et al, US 2005/0111360 A1: certain bits of a packet, such as bits in the IP header of an IP packet, are used to designate the type of service or Quality of Service (QoS) level to be afforded to the packet as it passes through a data communications network A user entitled to a certain QoS level logs into a service selection gateway SSG

5. Solomon et al, US 2003/0214905 A1: a quality of service coordinator for initializing a change indicator at the start of operation; memory for storing the change indicator during a monitoring period; the quality of service coordinator operable during the monitoring period and further comprising: a frame processor for monitor the received change indicator for changes in the quality of service requirements; a comparator for comparing the received change indicator to the most recently stored updating the change indicator in response to the monitoring step; an updator operable, in response to detecting a change in the change indicator, to update the stored quality of service parameters, and to store the new change indicator

6. Lee, US 2003/0126286 A1: converting a data packet from a first quality of service (QoS) structure to a second QoS structure to determine a priority level of the data packet received at a system configured to receive data packets of the second QoS structure, comprising: receiving a data packet having a first quality of service (QoS) structure at a system configured for a second QoS structure; analyzing prescribed header information of the received data packet to determine a priority level of the data packet; transforming the priority level information from the header of the received data packet into a corresponding priority level of the second QoS structure using a transformation table; and modifying the header information of the received data packet to include the transformed priority level corresponding to the second QoS structure

7. Scott, US 2006/0209796 A1: transmission control module defines the format for each data packet, and updates and synchronizes header information in the data packets

8. Kloth et al, US 6798746 B1: IP packet modifier (1) assigning the packet an initial class of service value based upon a class of service value encoded in a received

IP packet if such class of service value is encoded in the packet and the port is a trunk port; (2) assigning the packet an initial class of service value configured for the port if (a) no class of service value encoded in the received IP packet and if the port is a trunk port, or (b) the port is an access port; (3) reassigning the packet a class of service value configured for the packet's MAC destination address if such value is configured; and (4) comparing said flow information from the packet with configured Access Control Entries (ACEs) and if the packet's flow matches a configured ACE reassigning the packet a class of service value corresponding to the class of service value configured for the matched ACE; an active flow table storing active flows and corresponding quality of service parameters specifying at least an output queue for each active flow; a codepoint generator responsive to said flow information extractor and said quality of service parameters

9. Sheth et al, US 2002/0103925 A1: using a dynamically modifiable combination of fields of an IPv4 packet header to classify the packet

10. Parker et al, US 7463628 B2: command instruction set for a packet data modification processor has a format in which a packet address, if present, specifies an encapsulated layer within the packet and a location within this encapsulated layer; wherein the at least one command within the command instruction set specifies deriving at least a portion of a first packet from data taken from a second packet or the command

11. Parker et al, US 7292591 B2: packet parser functions are distributed throughout a packet processing system comprising a packet classification system and a packet modification system

12. McDysan et al, US 2005/117576 A1: network access system including a programmable access device having distributed service control wherein as a result of a policing function, marker/policer may discard nonconforming packets, mark nonconforming packets (e.g., with a higher or lower priority), and/or count nonconforming packets, depending upon its configuration; and, if marking is required, the marker/policer may set bits in the Differentiated Services (DiffServ)/TOS byte in the IP packet header, and/or the 3-bit MPLS experimental field, and/or the 20-bit MPLS label field, and/or other fields as configured by control interface 164 for the particular packet stream

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Xavier Wong whose telephone number is 571.270.1780.

The examiner can normally be reached on Monday through Friday 8:30 am - 6:00 pm

(EST).

    If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Seema Rao can be reached on 571.272.3174. The fax phone number for

the organization where this application or proceeding is assigned is 571.273.8300.

    Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866.217.9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800.786.9199 (IN USA OR CANADA) or 571.272.1000.

/Xavier Szewai Wong/   /Kevin C. Harper/
x.s.w   Primary Examiner, Art Unit 2416
29th August 2009